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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/502,810	02/11/2000	Jonathan S. Brecher	103544.127	5710

7590 08/11/2004  
Jason A Reyes  
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EXAMINER

ALLEN, MARIANNE P

ART UNIT PAPER NUMBER

1631

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/502,810

Applicant(s)

BRECHER, JONATHAN S.

Examiner

Marianne P. Allen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 51-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 51-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2 pages.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Claims 45-50 have been cancelled and claims 51-72 newly introduced.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 112***

Claims 51-72 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

Basis for new claims 51-72 was stated to be on pages 4-6, 13-15, 18-24, and 28-29 of the specification. The method steps as recited are not seen here. There does not appear to be contemplation of a generic method comprising the steps as recited in the claims. While applicant has pointed to basis in the specification for particular phrases or concepts in the present claims, no basis is seen for the totality of the presently claimed method and computer software. At the very least, the method with the generic steps of “dividing the name into a series of text string fragments,” “associating each text string,” “consolidating the list,” and “repeating the consolidating step” is not contemplated by the specification. Note that the originally filed claims, figures, and description of the invention do not describe the method and computer software as being contemplated as presently claimed. Many of the particular processing steps disclosed in the specification for parsing text strings are omitted by these generic steps. Applicant is requested to point

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to basis in the specification (by page and line number) for each of the steps, for the order and breadth of the steps, and for each of the claims.

Claims 51-72 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. This is an enablement rejection.

Claims 51-72 are directed to a method for use in deriving chemical structural information and computer software.

The method of claim 1 requires “dividing,” “associating” and “consolidating.” The verbs “dividing,” “associating,” and “consolidating” do not describe with particularity nor enable the specific and concrete actions that must be taken to achieve or accomplish the stated goal. The specification discloses a method of processing a text string for a chemical name according to some very specific text processing rules (e.g. converting all to lower case) and some very specific chemical nomenclature rules (e.g. separating the string “pentane” into the substrings “pent” and “ane” and not the substrings “penta,” “n,” and “e”). The text substrings are associated with particular data regarding its type/subtype and original position in the text string (context/environment) again according to a particular algorithm. The specification discloses a method of consolidating the resulting meaningful substrings according to a particular algorithm to build a chemically accurate computer readable diagrammatic representation of the final resulting structure using a connectivity table. However, the claims as written omit critical steps to achieve the desired result.

The specification provides a specific example of a “locant map,” an “attach-in map,” and an “attach-out map.” There is no disclosure of the metes and bounds of all such data objects that are intended to be encompassed by these terms nor guidance on how to make or use them. The art of record and in the specification do not demonstrate that these are well known and routinely used maps in the area of chemical structural derivation.

At least claim 53 recites “examining the environment” and “compatible with the environment.” The metes and bounds of these phrases are not known. How does one examine the environment? What constitutes a “nearby nomToken”? Is this with respect to the list?

At least claim 54 recites “initially classified by the highest Type and Subtype appropriate for the text string from a ranked list.” The metes and bounds of this phrase are not known. What constitutes “appropriate”? How is the ranked list generated or where does it come from?

Claims 51-72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims indicate that a nomToken comprises a connection table, a locant map, an attach-in map, and an attach-out map and wherein each nomToken is classified by Type and Subtype. However, this is in contradiction to the specification at least at page 14 where a nomToken also includes the text of a known string. As such, the claims are confusing.

Claim 62 recites “to help cause.” This is confusing. If the set of instructions doesn’t result in the desired chemical structural information, what additional instructions are required?

Claim 51 recites “consolidating the list” and claim 62 recites “consolidate the list.” However, the preceding portion of the claims does not require that a list be made.

With respect to claim 60, what are “uncommon character of chemical significance?”

***Claim Rejections - 35 USC § 102***

Claims 51-72 are rejected under 35 U.S.C. 102(b) as being anticipated by Boyer et al. (U.S. Patent No. 5,345,516).

Boyer et al. discloses a method, computer system, and computer software for parsing text strings representing a chemical name and generating the correct structural diagram from this. The text string is broken into fragments according to particular rules to facilitate the analysis, the fragments are associated with the appropriate chemical structural information using delimiters and connection tables. Boyer et al. acquires a text string for a chemical name, divides it into text string fragments, and processes these strings until a single connection table corresponding to the structure of the chemical name results. This connection table can be used to display the structure. Although the specific names of the maps are not recited in Boyer et al., the concepts they represent appear to be disclosed by the stack manipulations (create-stack, find-group, connect, test) before the structural diagram is completed. See abstract; claims; Appendix J; Figure 12; column 1, line 44, through column 2, line 1; column 12, line 32, through column 14, line 40.

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Applicant's response does not provide any explanation as to why the present claims distinguish over Boyer et al. It appears that all of the processing required by the claims is performed by Boyer et al.

***Conclusion***

No claim is allowed.

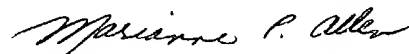
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne P. Allen whose telephone number is 571-272-0712. The examiner can normally be reached on Monday-Thursday, 5:30 am - 1:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571-272-0722. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.



Marianne P. Allen  
Primary Examiner  
Art Unit 1631

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mpa